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10/581,221	10/03/2007	Scott E. Hall	US03 0497 US2	1679

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EXAMINER
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CHIN, RANDALL E

ART UNIT	PAPER NUMBER
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3723

NOTIFICATION DATE	DELIVERY MODE
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09/16/2011

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

Application No.

10/581,221

Applicant(s)

HALL ET AL.

Examiner

Randall Chin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 5) ☒ Claim(s) 1-5, 7, 8 and 13-18 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 1-5, 7, 8 and 13-18 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 18 is objected to because of the following informalities:

Claim 18, line 7, it appears "the power members" should read –the paddle members--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adamsson 2,312,828 (hereinafter Adamsson) in view of Urbush 3,316,576 (hereinafter Urbush).

As for claim 1, the patent to Adamsson discloses in Figs. 1-3, for example, a rimmed brushhead comprising a brushhead member 11, which includes a bristle field having lowest bristles 14 and tallest bristles 12, 13, "adapted for cleaning teeth as part of a power toothbrush" (merely functional), wherein the brushhead member in operation moves could move by power in a reciprocating action, if so desired, and a ridge or rim member 16 extending around at least a substantial portion of the bristle field of the

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brushhead, the rim member 16 having a flat upper edge which is located lower than the top of the lowest bristles 14 (Figs. 2 and 3) and deemed higher than one-half the height of the tallest bristles in the bristle field as best shown in Figs. 2-5 (by apparent visual view) since the "rim member" 16 **can also include here the outer peripheral wall height extending downwards to the bottommost portion of the brushhead 11 as well (note, Merriam Webster's Collegiate Dictionary, Tenth Edition defines "rim" as the outer often curved or circular edge or border of something)**, "and otherwise configured and arranged to produce movement of fluid from the bristles toward the teeth during operation of the toothbrush" (at least to an extent; merely functional). It should be noted that even assuming arguendo that the flat upper edge is not higher than one-half the height of the tallest bristles in the bristle field, it would have still been obvious to one of ordinary skill in the art to have modified the heights of such bristles and/or of the rim member in order to optimally carry out the brushing operation and depending on particular desired results. The patent to Adamsson discloses all of the recited subject matter as set forth above with the exception of a rimmed powered brushhead which operates as part of a power toothbrush, comprising a powered brushhead member, wherein the brushhead member in operation moves by power in a reciprocating action. The patent to Urbush teaches in Figs. 1 and 2, for example, a powered toothbrush wherein a conventional toothbrush or brushhead 18, 19, 20 (Fig. 1; col. 1, lines 13-17 and 48-49) could be simply inserted into a holder housing 21 and powered actuated unit 10 and thus enable the brushhead member to move by power in a reciprocating action (col. 2, lines 33-48). It would have been obvious to one of ordinary skill in the art to have

simply provided the Adamsson toothbrush with a holder housing and powered actuated unit as suggested by Urbush for the purpose of enabling the brushhead member to move by power in a reciprocating action and thus improve and/or automate the brushing operation itself.

As for claim 2, the rim member is substantially continuous around the bristle field (Figs. 2-5; p. 2, col. 1, lines 15-21).

As for claim 3, there is a difference in flexibility between the rim member and the bristles in the bristle field as an inherent result of being different materials, resulting in differential motion between the bristles and the rim member and a pumping action for the fluid toward the teeth (and merely functional).

As for claim 4, the rim member is deemed “separate” (at least in terms of spacing; a broad term here) from the brushhead member.

As for claim 5, the rim member is integral with the brushhead member.

As for claim 7, the recitation “substantially all of the fluid moving off the bristles is directed toward the teeth and gums of a user” is merely functional in form adding no further structural limitations to the claim(s).

### ***Claim Rejections - 35 USC § 103***

4. Claims 8 and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calabrese et al. 2002/0124337 (hereinafter Calabrese) in view of Shipp 5,604,951 (hereinafter Shipp) and Urbush.

As for claim 8, Calabrese discloses in Figs. 1b, 2, 5 and 7 (more particularly, Fig. 5), for example, a brushhead member 2 “adapted for a power toothbrush,” which includes a bristle field 3, adapted for cleaning teeth as part of a power toothbrush, “wherein the brushhead member in operation moves in a reciprocating action” (not a positive limitation; see preamble language), at least two paddle members 4, 4 positioned on the brushhead member (Fig. 5), the paddle members 4, 4 each being straight (Fig. 5 embodiment), continuous, substantially equal in size, and deemed extending “substantially longitudinally” (a broader recitation; also, no specific standard has been set forth as to what exactly is “substantially longitudinally” and what is not “substantially longitudinally”) of the brushhead (Fig. 5), the paddle members extending upwardly from a bristle base with the bristles 3, wherein the paddle members are not as high as the bristle field (Fig. 7), so that a shear-type fluid cleaning effect on the teeth can be produced (also, note, such recitation is of no patentable moment here and could merely depend on how a user holds the device and/or how the brushing and manipulation of the device is carried out) wherein there are no bristles between the two paddle members 4, 4 (Fig. 5), and are “otherwise configured and arranged to produce movement of fluid from the bristles toward the teeth during operation of the toothbrush” (at least to an extent; merely functional). Note further that Calabrese shows a bristle field 3 basically extending entirely around the paddle members 4, 4 with the exception of at one lateral end, for example, in Fig. 5. The patent to Calabrese discloses all of the recited subject matter as set forth above with the exception of the bristle field extending entirely around the paddle members and a powered brushhead member which operates

as part of a power toothbrush, comprising a powered brushhead member, wherein the brushhead member in operation moves by power in a reciprocating action.

The patent to Shipp discloses in Figs. 1-3 a rectangular prophy or paddle member device 18 wherein a bristle field 26, 28, 30 extends entirely around the paddle member 18 (Fig. 1). The patent to Urbush teaches in Figs. 1 and 2, for example, a powered toothbrush wherein a conventional toothbrush or brushhead 18, 19, 20 (Fig. 1; col. 1, lines 13-17 and 48-49) could be simply inserted into a holder housing 21 and powered actuated unit 10 and thus enable the brushhead member to move by power in a reciprocating action (col. 2, lines 33-48). It would have been obvious to one of ordinary skill in the art to have modified Calabrese's brushhead such that the bristle field extends entirely around the paddle members as taught by Shipp for increasing the brushing area for improved brushing and efficiency and to have further provided the Calabrese toothbrush with a holder housing and powered actuated unit as suggested by Urbush for the purpose of enabling the brushhead member to move by power in a reciprocating action and thus improve and/or automate the brushing operation itself.

As for claim 13, in Calabrese, the paddle members are still deemed parallel (Fig. 4).

As well as claim 14 is understood and to the extent that this is shown in Applicant's figures, the paddle members 4, 4 are deemed sufficiently different in "configuration" (i.e., at least with respect to the bristle members or in the sense that they are differently "configured" by being simply physically spaced from each other) that they can move out of phase with each other during movement of the brushhead 2. The

paddle members 4, 4 could also be of different material since "one or more" components can be chemically modified by a chemical surface treatment or surface oxidation (Calabrese paragraph [0037]).

As for claim 15, the paddle members 6 clearly have a different flexibility from the bristles (paragraphs [0024], [0025] and [0033]).

As for claim 16, in Calabrese, there are wing portions (not explicitly labeled but still clearly shown in Fig. 9) formed by ridge 7 which extend outwardly from the paddle members along the length thereof (Fig. 9; paragraph [0055]).

As for claim 17, in Calabrese, there are also wing portions at opposing ends of the paddle members (Fig. 9; paragraph [0055]).

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Calabrese in view of Urbush.

To avoid a redundant rejection, claim 18 is rejected similarly as above for claim 8 minus the Shipp patent. It will be added that Calabrese clearly teaches that the paddle members could extend for substantially the entire length of the brushhead (see Calabrese paragraph [0011]) and that the paddle members divide the bristle field 3, 3 in two (Fig. 5).



***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Shekalim and Hukuba are pertinent to various powered toothbrush/brushhead arrangements.

7. Applicant's arguments with respect to claims 1-5, 7, 8 and 13-18 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments are deemed adequately addressed by the above art rejections.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randall Chin whose telephone number is (571) 272-1270. The examiner can normally be reached on Monday through Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Randall Chin/  
Primary Examiner, Art Unit 3723

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